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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,947	06/25/2003	W. Perry Dowst	65841-017 (WMST-003)	3129
20874	7590	06/30/2005	EXAMINER	
WALL MARJAMA & BILINSKI 101 SOUTH SALINA STREET SUITE 400 SYRACUSE, NY 13202			PRICE, CARL D	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/603,947	DOWST ET AL.	
	Examiner	Art Unit	
	CARL D. PRICE	3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2004 (RCE, Preliminary Amended).
- 2a) ☐ This action is FINAL.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 106-160 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 106-160 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
 - 1. ☐ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Request for Continued Examination under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/07/2005 has been entered.

Status of Claims

Claims 1-105 have been cancelled by applicant.

Numbering of claims is not in accordance with 37 CFR 1.126

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 1-55 have been renumbered as claims 106-160.

Response to Arguments

Applicant's arguments with respect to amended claim 106-160 have been considered but are moot in view of the new ground(s) of rejection.

Objection to Disclosure

The disclosure is objected to because of the following informalities:

In paragraph [0044] the meaning of the phrase “(CAN’T FIND ON FIGURE)” is not understood.

Appropriate correction is required.

Objection to Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

- Also, regarding claims 115, 126, 137 and 148 the specification does not support an aspect ratio which is in the “range of about 8-9”.

Claim Rejections - 35 USC § 11,2 the first paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Amendment Introduces New Matter

The amendment filed 04/07/2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Notwithstanding applicant’s statement that the method of calculation, added to paragraph [0096], “*is well known in the art and should not be considered to be new matter*” the original disclosure does not support this particular manner of arriving at values resulting from this newly

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added "method of calculation". Nor, has applicant provided evidence to show this method of calculation is indeed known in the art.

Also, while the values applied to the calculation added to paragraph [0096] appear to have support in the specification as originally filed the resultant calculated values of "9.1" and "8.3" respectively are not found in any of the original specification, drawings or claims. Also, regarding claims 115, 126, 137 and 148 the specification does not support an aspect ratio which is in the "range of about 8-9". As to any reliance on the drawing figures to support applicant's amendment to the specification, applicant is reminded that measurement of the drawing features are of little value. See *Hockerson-Halberstadt, Inc. v. Avia Group Int'l*, 222 F.3d 951, 956, 55 USPQ2d 1487, 1491 (Fed. Cir. 2000) (The disclosure gave no indication that the drawings were drawn to scale. "[I]t is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue."). However, the description of the article pictured can be relied on, in combination with the drawings, for what they would reasonably teach one of ordinary skill in the art. In *re Wright*, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977) ("We disagree with the Solicitor's conclusion, reached by a comparison of the relative dimensions of appellant's and Bauer's drawing figures, that Bauer clearly points to the use of a chime length of roughly 1/2 to 1 inch for a whiskey barrel.' This ignores the fact that Bauer does not disclose that his drawings are to scale. ... However, we agree with the Solicitor that Bauer's teaching that whiskey losses are influenced by the distance the liquor needs to traverse the pores of the wood' (albeit in reference to the thickness of the barrelhead)" would have suggested the desirability of an increased chime length to one of ordinary skill in the art bent on further reducing whiskey losses." 569 F.2d at 1127, 193 USPQ at 335-36.)

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

Claim 106 is objected to because of the following informalities:

- In the last line of claim 106, the term "central area" should be - - the central area

- -

. Appropriate correction is required.

35 U.S.C. 112, second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

35 U.S.C. 112: Claims 106-128, 134-137 and 145-148

Claims 106-128, 134-137 and 145-148 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 105 and 117, the recitation "a single thermally conductive member ...having an inner diameter and an outer diameter" causes the claims to be vague and indefinite. In this regard, it would appear applicant is attempting to claim that the single thermally conductive member has an inner peripheral edge defining an inner diameter and an outer peripheral edge defining an outer diameter. Absent a clearer recitation of these limitations it is not clear which portion of the single thermally conductive member necessarily relates to the "an inner diameter" and the "an outer diameter" respectively. Similarly, regarding claims 111-114, 122-125, 134-136 and 145-147, it is unclear which portion of the single thermally conductive member necessarily relates to the "a thickness", "a radial dimension", "a length", etc. Also, in regard to claims 105 and 117, the recitation "extending around the periphery of the external bottom surface" is misdescriptive of the invention. The term "around" suggests the single thermally conductive member is positioned outwardly of or spatially about the the external bottom surface. It is noted that the thermally conductive member is positioned adjacent to and along the entire extent of a peripheral edge of the external bottom side.

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The term "an aspect ratio" causes claims 115, 126, 137 and 148 to be vague and indefinite since applicant has not defined which dimensions of portions, or aspects, of the plate intended be calculated as a ratio.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 106-160: rejected under 35 U.S.C. 103(a)

Claims 106-160 are rejected under 35 U.S.C. 103(a) as being unpatentable over US000132793 (BARNES) in view of US004643164 (LaForge) and US002213376 (BENESH).

US000132793 (BARNES) shows and discloses a system for heating a substance comprising:

- a vessel (not shown) with an external bottom surface having attached to a ring shaped single thermally conductive member (h) formed with a plurality of undulating protrusions (see figure 2);
- a top housing side structure (i) which includes a top rim (not referenced);

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- a burner outlet head (g) having a diameter not greater than an inner diameter of the ring shaped thermally conductive member (h); and
- a plurality of air inlet vents (b') in a bottom housing encasing the burner and wherein the bottom housing is configured (via (j')) to couple with a bottom rim (not reference) of the top housing (i).

US000132793 (BARNES) shows and discloses the invention substantially as set forth in the claims with possible exception to:

- exhaust vents in the top housing side structure;
- the top housing upper rim and the thermally conductive ring being “fixedly” attached to the top housing; and
- a bottom housing encasing the burner and configured to couple with the bottom rim of top housing.

US004643164 (LaForge) teaches, from the same vessel heating field of endeavor as **US000132793 (BARNES)**, providing a skirt (12, 14) with a series of air (21) and exhaust vents (54); and a base (12) configured to substantially encase the heat source and a baffle plate (24) having air passages and located below the burner. The skirt is separable from the base and the base is storable within the vessel.

US002213376 (BENESH) teaches, from the same vessel heating field of endeavor as **US000132793 (BARNES)**, fixedly attaching a single (i.e. – the thermally conductive elements are formed as a single unit) top housing side structure (8) and thermally conductive member (4, 10, 19, etc.) to a vessel bottom wall (2).

In regard to claims 106-160, for the purpose of making the base readily separable from the base and the base is storable within the vessel and to increase the thermal heat efficiency by confining the flow to heat about the vessel bottom, it would have been obvious to a person having ordinary skill in the art to modify **US000132793 (BARNES)** to include exhaust vents in the top housing side structure, the top housing upper rim to be attached to the vessel, and the

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bottom housing configured to couple with the bottom rim of top housing, in view of the teaching of US004643164 (LaForge). And, for the purpose of increasing the thermal heat transfer and therefore efiecinency of the thermal transfer member, it would have been obvious to a person having ordinary skill in the art to further modify US000132793 (BARNES) by “fixedly” attaching the thermal conductive member to a vessel, in view of the teaching of US002213376 (BENESH).

In regard to claims 107-116, 119-128, 131-139, 141-145, since shape of the protrusions the manner of coupling (e.g. – soldering, brazing, gluing, etc.), the height of the vessel, length of the protrusions, aspect ratio of the protrusions, etc. would depend on numerous design concerns such as the overall size and shape of both the burner and vessel, the type of substance being heat, the amount of heat intended to be transferred to the substance through the vessel wall, etc., to configure the protrusions to have dimensions aand to be attached in the manner set forth in the claims, can be viewed as nothing more than merely a matter of choice in design absent the showing of any new or unexpected results produced there from over the prior art of record.

Conclusion

See the attached PTO FORM for prior art made of record that is not relied upon, which is considered pertinent to applicant's disclosure.

USPTO CUSTOMER CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARL D. PRICE whose telephone number is (571) 272-4880. The examiner can normally be reached on Monday through Friday between 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Carl D. Price', with a large, stylized loop at the end.

CARL D. PRICE

Primary Examiner

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cp